PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 NPL Characteristics Data Collection Form Sterling Steel Foundry - 09/16/93

PAGE:

1

Record Information

- Site Name: Sterling Steel Foundry (as entered in CERCLIS)
- 2. Site CERCLIS Number: ILD984903245
- 3. Site Reviewer: Lynnette Ann Mick
- 4. Date: September 15, 1993
- 5. Site Location: Sauget/St.Clair, Illinois (City/County, State)
- 6. Congressional District: 22
- 7. Site Coordinates: Single

Latitude: 38 35'42.0" Longitude: 90 10'00.0"

Site Description

- 1. Setting: Urban
- 2. Current Owner: Other Publically owned company
- 3. Current Site Status: Active
- 4. Years of Operation: Active Site , from and to dates: 1922 to present
- 5. How Initially Identified: State/Local Program
- 6. Entity Responsible for Waste Generation:
 - Manufacturing
 - Metal Forging and Stamping
- 7. Site Activities/Waste Deposition:
 - Surface Impoundment
 - Waste Piles
 - Airborne Release/Incineration

PAGE:

Waste Description

- 8. Wastes Deposited or Detected Onsite:
 - Organic Chemicals
 - Solvents
 - Pesticides/Herbicides
 - Metals
 - PCBs

Response Actions

9. Response/Removal Actions:

RCRA Information

- 10. For All Active Facilities, RCRA Site Status:
 - Not Applicable

Demographic Information

- 11. Workers Present Onsite: Yes
- 12. Distance to Nearest Non-Worker Individual: > 10 Feet 1/4 Mile
- 13. Residential Population Within 1 Mile: 3410.0
- 14. Residential Population Within 4 Miles: 93278.0

Water Use Information

- 15. Local Drinking Water Supply Source:
 - Surface Water (within 15 mile distance limit)
- 16. Total Population Served by Local Drinking Water Supply Source: Not Applic
- 17. Drinking Water Supply System Type for Local Drinking

PRESCORE 2.0 - PRESCORE TCL File 05/11/93 NPL Characteristics Data Collection Form Sterling Steel Foundry - 09/16/93

PAGE:

3

Water Supply Sources:

- Not Applicable
- 18. Surface Water Adjacent to/Draining Site:
 - Other ditch
 - Wetland

.

.

PAGE:

PREscore 2.0 - PRESCORE.TCL File 05/11/93 HRS DOCUMENTATION RECORD Sterling Steel Foundry - 09/16/93

1. Site Name: Sterling Steel Foundry (as entered in CERCLIS)

2. Site CERCLIS Number: ILD984903245

3. Site Reviewer: Lynnette Ann Mick

4. Date: September 15, 1993

5. Site Location: Sauget/St.Clair, Illinois

(City/County, State)

6. Congressional District: 22

7. Site Coordinates: Single

Latitude: 38 35'42.0"

Longitude: 90 10'00.0"

	Score
Ground Water Migration Pathway Score (Sgw)	0.00
Surface Water Migration Pathway Score (Ssw)	0.00
Soil Exposure Pathway Score (Ss)	1.14
Air Migration Pathway Score (Sa)	26.79

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

PAGE:

100

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 GROUND WATER MIGRATION PATHWAY SCORESHEET Sterling Steel Foundry - 09/16/93

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors Maximum Value Value Assigned Likelihood of Release to an Aquifer Aquifer: Cahokia Alluvium 1. Observed Release 550 2. Potential to Release 2a. Containment 10 10 2b. Net Precipitation 10 3 2c. Depth to Aquifer 5 5 2d. Travel Time 35 25 2e. Potential to Release [lines 2a(2b+2c+2d)] 500 330 3. Likelihood of Release 550 330 Waste Characteristics 4. Toxicity/Mobility 2.00E+03 5. Hazardous Waste Quantity 10000 6. Waste Characteristics 100 56 Targets 7. Nearest Well 50 0.00E+00 8. Population 8a. Level I Concentrations * ** 0.00E+00 8b. Level II Concentrations ** 0.00E+00 8c. Potential Contamination ** 0.00E+00 8d. Population (lines 8a+8b+8c) ** 0.00E+00 9. Resources 5 0.00E+00 10. Wellhead Protection Area 20 0.00E+00 11. Targets (lines 7+8d+9+10) ** 0.00E+00 12. Targets (including overlaying aquifers) ** 0.00E+00 13. Aquifer Score 100 0.00

GROUND WATER MIGRATION PATHWAY SCORE (Sgw)

^{*} Maximum value applies to waste characteristics category.

^{**} Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAC SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93 PAGE:

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release 2. Potential to Release by Overland Flow	550	0
2a. Containment 2b. Runoff 2c. Distance to Surface Water	10 25 25	10 1 25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)] 3. Potential to Release by Flood	500	260
3a. Containment (Flood) 3b. Flood Frequency	10 50	10 7
3c. Potential to Release by Flood (lines 3a x 3b) 4. Potential to Release (lines 2d+3c)	500	70 330
5. Likelihood of Release	550	330
Waste Characteristics		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity 8. Waste Characteristics	100	10000
Targets		
9. Nearest Intake 10. Population	50	0.00E+00
10a. Level I Concentrations 10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00 0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources 12. Targets (lines 9+10d+11)	5 **	0.00E+00 0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAGE SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	330
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation 16. Hazardous Waste Quantity 17. Waste Characteristics	* * 1000	5.00E+08 10000 1000
Targets		
18. Food Chain Individual 19. Population 19a. Level I Concentrations 19b. Level II Concentrations 19c. Pot. Human Food Chain Contamination 19d. Population (lines 19a+19b+19c) 20. Targets (lines 18+19d)	50 ** ** ** **	0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAGE SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	330
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc. 24. Hazardous Waste Quantity 25. Waste Characteristics	* * 1000	5.00E+08 10000 1000
Targets		
26. Sensitive Environments 26a. Level I Concentrations 26b. Level II Concentrations 26c. Potential Contamination 26d. Sensitive Environments (lines 26a+26b+26c) 27. Targets (line 26d)	** ** ** **	0.00E+00 0.00E+00 0.00E+00 0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.00
29. WATERSHED SCORE	100	0.00
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAGE GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93 PAGE:

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release to Aquifer Aquifer: Cahokia Alluvium		
1. Observed Release 2. Potential to Release 2a. Containment 2b. Net Precipitation 2c. Depth to Aquifer 2d. Travel Time 2e. Potential to Release [lines 2a(2b+2c+2d)]	550 10 10 5 35	0 10 3 5 25
3. Likelihood of Release Waste Characteristics	550	330
4. Toxicity/Mobility/Persistence 5. Hazardous Waste Quantity 6. Waste Characteristics	* * 100	2.00E+03 10000 56
Targets		
7. Nearest Intake 8. Population	50	0.00E+00
8a. Level I Concentrations 8b. Level II Concentrations 8c. Potential Contamination 8d. Population (lines 8a+8b+8c) 9. Resources	** ** ** 5	0.00E+00 0.00E+00 0.00E+00 0.00E+00
10. Targets (lines 7+8d+9)	**	0.00E+00
11. DRINKING WATER THREAT SCORE	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAGE GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
12. Likelihood of Release (same as line 3)	550	330
Waste Characteristics		
13. Toxicity/Mobility/Persistence/Bioacc. 14. Hazardous Waste Quantity 15. Waste Characteristics	* * 1000	1.00E+07 10000 560
Targets		
16. Food Chain Individual 17. Population 17a. Level I Concentrations 17b. Level II Concentrations	50 ** **	0.00E+00 0.00E+00 0.00E+00
17c. Pot. Human Food Chain Contamination 17d. Population (lines 17a+17b+17c) 18. Targets (lines 16+17d)	1	0.00E+00 0.00E+00 0.00E+00
19. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 PAGE GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET Sterling Steel Foundry - 09/16/93

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
20. Likelihood of Release (same as line 3)	550	330
Waste Characteristics		
21. Ecosystem Tox./Mobility/Persist./Bioacc. 22. Hazardous Waste Quantity 23. Waste Characteristics	* * 1000	1.00E+06 10000 320
Targets		
24. Sensitive Environments 24a. Level I Concentrations 24b. Level II Concentrations 24c. Potential Contamination 24d. Sensitive Environments (lines 24a+24b+24c) 25. Targets (line 24d)	** ** ** ** **	0.00E+00 0.00E+00 0.00E+00 0.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0.00
27. WATERSHED SCORE	100	0.00
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	0.00

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 SOIL EXPOSURE PATHWAY SCORESHEET Sterling Steel Foundry - 09/16/93

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	. 550
Waste Characteristics		
2. Toxicity 3. Hazardous Waste Quantity 4. Waste Characteristics	* * 100	1.00E+04 100 32
Targets		
5. Resident Individual 6. Resident Population	. 50	0.00E+00
6a. Level I Concentrations 6b. Level II Concentrations	**	0.00E+00 0.00E+00
6c. Resident Population (lines 6a+6b) 7. Workers	** 15	0.00E+00 5.00E+00
8. Resources 9. Terrestrial Sensitive Environments 10. Targets (lines 5+6c+7+8+9)	5 *** **	0.00E+00 0.00E+00 5.00E+00
11. RESIDENT POPULATION THREAT SCORE	**	8.80E+04

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

^{***} No specific maximum value applies, see HRS for details.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 SOIL EXPOSURE PATHWAY SCORESHEET Sterling Steel Foundry - 09/16/93

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility 13. Area of Contamination 14. Likelihood of Exposure	100 100 500	1.00E+01 8.00E+01 5.00E+01
Waste Characteristics		
15. Toxicity 16. Hazardous Waste Quantity 17. Waste Characteristics	* * 100	1.00E+04 100 32
Targets		
18. Nearby Individual 19. Population Within 1 Mile 20. Targets (lines 18+19)	1 ** **	1.00E+00 3.00E+00 4.00E+00
21. NEARBY POPULATION THREAT SCORE	**	6.40E+03
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	1.14

^{*} Maximum value applies to waste characteristics category. ** Maximum value not applicable.

PRESCORE 2.0 - PRESCORE.TCL File 05/11/93 AIR PATHWAY SCORESHEET Sterling Steel Foundry - 09/16/93

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release 2. Potential to Release 2a. Gas Potential to Release 2b. Particulate Potential to Release	550 500 500	300 340
2c. Potential to Release 3. Likelihood of Release	500 550	340 340
Waste Characteristics		
4. Toxicity/Mobility 5. Hazardous Waste Quantity 6. Waste Characteristics	* * 100	1.00E+04 10000 100
Targets		
7. Nearest Individual 8. Population	50	2.00E+01
8a. Level I Concentrations 8b. Level II Concentrations	** **	0.00E+00 0.00E+00
8c. Potential Contamination 8d. Population (lines 8a+8b+8c)	** **	4.20E+01 4.20E+01
9. Resources 10. Sensitive Environments	5	0.00E+00
10a. Actual Contamination 10b. Potential Contamination	***	0.00E+00 3.00E+00
10c. Sens. Environments(lines 10a+10b) 11. Targets (lines 7+8d+9+10c)	***	3.00E+00 6.50E+01
AIR MIGRATION PATHWAY SCORE (Sa)	100	2.68E+01

^{*} Maximum value applies to waste characteristics category.

^{**} Maximum value not applicable.

^{***} No specific maximum value applies, see HRS for details.

1

PREscore 2.0 - PRESCORE.TCL File 05/11/93 REFERENCES Sterling Steel Foundry - 09/16/93

- Illinois State Geological Survey selected well logs. 1.
- Ecology and Environment, Inc. (E&E). Ma, 1988, Expanded Site 2. Investigation Dead Creek Project Sites at Cahokia/Sauget, Illinois prepared for the IEPA, Division of Land Pollution Control.
- Illinois Environmental Protection Agency. September 23, 1992. 3. CERCLA Screening Site Inspection Report for Sauget Sites Area #1 prepared by Tim Murphy, Springfield, Illinois.
- Environmental Protection Agency 40 CFR Park 300 Hazard Ranking System; 4. Final Rule. Federal Register 55:241. December 14, 1990.
- ISWS Hydrology Division. July 26, 1993. Public & Industrial, 5. Commercial Survey (PICS) Database and Private Well Database for St. Clair Co., T 1N, 2N and R 9W, 10W.
- IEPA, Division of Public Water Supplies. May 6, 1993. Ground-6. water Monitoring Location Report.
- Herthfield, David M. Technical Paper No. 40, Rainfall Frequency Atlas 7. of the U.S. for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years.
- Illinois Environmental Protection Agency. March 3, 17, and 18, 1993. Site reconnaissance visits to Sterling Steel Foundry, Inc. performed by IEPA personnel.
- U.S. Geological Survey, 1974, Monks Mound, IL. Quadrangle 225A; 1982, Granite City, IL-MO Quadrangle 225B; 1974, Cahokia, IL-MO Quadrangle 225C; 1982, French Village, IL, 225D (all 7.5 minute series).
- Illinois Environmental Protection Agency. CERCLA SSI Logbook for 10. Sterling Steel Foundry, Inc. March 17 and 18, 1993.
- Analytical results from CERCLA SSI March 17 and 18, 1993 sampling event performed and chemically analyzed by IEPA personnel.
- 12. Bureau of the CENSUS. County and City Data Book. 1990 U.S. Census
- 13. Illinois Department of Transportation. April 7, 1988. Aerial photograph.
- U.S. Dept. of the Interior. Fish and Wildlife Service, National 14. Wetlands Inventory Maps: Monks Mound, IL, Granite City, IL, Cahokia, IL, French Village, IL.